

Amendment to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.(currently amended) An electric type compressor motor comprising:

a housing having an inner circumferential surface, the housing also having a first thermal expansion coefficient, the housing further having an elastic part and having a plurality of recesses which are formed near ~~around~~ the elastic part extending outwardly in the radial direction of the inner circumferential surface to define corresponding first voids;

an electric motor including a circular stator core pressed to an inside of the housing by tight fit, the stator core having an outer circumferential surface and a central axis, the stator core also having a second thermal expansion coefficient that is different from the first thermal expansion coefficient;

a compressor mechanism accommodated in the housing and connected to the electric motor for compressing gas as driven by the electric motor;

wherein ~~the recesses extend along the direction of the central axis of the stator core;~~ second voids are defined between the inner circumferential surface outside the recesses of the housing and the outer circumferential surface of the stator core so as to prevent the inner and the outer circumferential surfaces from contacting each other in a circular region, wherein the first voids and the second voids extend substantially along the length of the stator core in the direction of the central axis of the stator core and wherein one of the first voids and corresponding one of the second voids define a void,

wherein the elastic part of the housing is located near each of the first voids, and wherein the elastic part of the housing is elastically deformed when the housing and the stator core expand or shrink so as to tightly fit each other due to a differential between the first and the second thermal expansion coefficients.

2. (previously amended) The electric type compressor according to claim 1, wherein the first thermal expansion coefficient is larger than the second thermal expansion coefficient.

3. (previously amended) The electric type compressor according to claim 1, wherein the first thermal expansion coefficient is smaller than the second thermal expansion coefficient.

4. (cancelled)

5. (currently amended) The electric type compressor according to claim 1, wherein the number of the first voids is three or more than three.

6. (currently amended) The electric type compressor according to claim 1, wherein the housing and the stator core have a plurality of contacting portions therebetween, the plurality of the second voids being provided in such a manner that the plurality of contacting portions are arranged at intervals of an equal angle around the axis.

7. (currently amended) The electric type compressor according to claim 1, wherein the housing and the stator core have a plurality of contacting portions therebetween, the plurality of the second voids being provided in such a manner that the plurality of contacting portions are arranged at intervals of an unequal angle around the axis.

8. (cancel)

9. (currently amended) The electric type compressor according to claim 8¹, wherein each of the recesses of the stator core has a bottom surface in which a region is located at the opposite sides in a circumferential direction of the stator core, at least the region existing in a first imaginary

cylindrical surface, whose center is located on the axis, the inner circumferential surface and the outer circumferential surface being contacted with each other in a contact region, the contact region existing in a second imaginary cylindrical surface, whose center is also located on the axis, radial differential between the first and the second imaginary cylindrical surfaces being predetermined in such a manner that a ratio of the radial differential to the radius of the second imaginary cylindrical surface is approximately from 0.5 to 1.5%.

10. (cancel)

11. (cancelled)

12. (cancelled)

13. (currently amended) The electric type compressor according to claim 1, wherein the number of the elastic part is five or less than five around the axis of the stator core.

14. (previously amended) The electric type compressor according to claim 1, wherein each of the recesses of the housing has a bottom surface in the shape of a concave surface.

15. (currently amended) The electric type compressor according to claim 1, wherein the inner circumferential surface and outer circumferential surface being contacted with each other in a contact region, the contact region existing in an imaginary cylindrical surface, whose center is located on the axis, the contact region having a first predetermined area, the imaginary cylindrical surface having the same length as the stator core in the direction of the axis, the imaginary cylindrical surface also having a non-contact region where the inner circumferential surface and the outer circumferential surface do not contact each other, the non-contact region having a second predetermined area, the voids being formed in such a manner that the first predetermined

area becomes smaller than the second predetermined area.

16. (previously amended) The electric type compressor according to claim 15, wherein a ratio of the first predetermined area to the total area of the first predetermined area and the second predetermined area is 30% or less than 30%.

17. (previously amended) The electric type compressor according to claim 1, further comprising a coil that is intensively wound around the stator core.

18. (previously amended) The electric type compressor according to claim 1, further comprising a coil that is distributively wound around the stator core.

19. (previously amended) The electric type compressor according to claim 1, wherein the housing is made of aluminum and/or aluminum alloy, the stator core being made of silicone steel.

20. (cancel)

21. (cancelled)

22. (previously amended) The electric type compressor according to claim 1, wherein a first space and a second space are defined at opposite sides of the axis in the housing, the voids interconnecting the first space with the second space, the compression mechanism being placed at the first space side, a mouth of the electric type compressor, which is formed through the housing so as to correspond to the second space, being connected with an external piping, the voids being utilized as a gas passage that interconnects the compression mechanism with the mouth.